

In the Claims:

Please amend the claims as indicated below.

1. (Canceled)
2. (Canceled)
3. (Currently Amended) In a computer system operatively coupled to a network and capable of executing a communication process for sending and receiving electronic mail documents, a method performed by the computer system comprising:
  - (A) creating a shadow document from an original document, wherein the original document is an electronic mail message within a conversation thread of electronic mail messages, parsing the original document for selected logistical data comprising any of sender, receiver, original size, subject, or carbon copies of the original document, and storing the logistical data in the shadow document;
  - (B) identifying, within the conversation thread of electronic mail messages, a parent document and a child document of the original document, wherein the original document is a reply to the parent document of the original document and wherein the child document of the original document is a reply to the original document, and storing references thereto in the shadow document; and

(C) storing the shadow document in a computer usable memory, determining and visually rendering a complete tree representing the conversation thread of electronic mail messages responsive at least in part to the shadow document, wherein the visual rendering of the complete tree representing the conversation thread of electronic mail messages graphically represents the original document as a child of the identified parent document and as a parent of the identified child document, and wherein after deleting of the original document a graphical structure the visual rendering of the complete tree representing the conversation thread of electronic mail messages is preserved except with a modified graphical representation of the original document, wherein the modified graphical representation of the original document within the visual rendering of the complete tree representing the conversation thread of electronic mail messages after deleting of the original document visually indicates that the original document has been deleted~~after deleting of the original document.~~

4. (Previously presented) The method of claim 3 wherein (A) further comprises:

(A1) filtering the original document for selected content.

5. (Previously presented) The method of claim 3 wherein the shadow document further comprises selected data from the content of the original document.

6. (Canceled)

7. (Canceled)

8. (Canceled)

9. (Currently amended) In a computer system operatively coupled to a network and capable of executing a communication process for sending and receiving electronic mail documents, a method performed by the computer system comprising:

(A) creating a shadow document from an original document, wherein the original document is an electronic mail message within a conversation thread of electronic mail messages;

(B) identifying, within the conversation thread of electronic mail messages, a parent document and a child document of the original document, wherein the original document is a reply to the parent document of the original document and wherein the child document of the original document is a reply to the original document, and storing references thereto in the shadow document;

(C) storing the shadow document in a computer usable memory, determining and visually rendering a complete tree representing the conversation thread of electronic mail messages responsive at least in part to the shadow document, wherein the visual rendering of the complete tree representing the conversation thread of electronic mail messages graphically represents the original document as a child of the identified parent document and as a parent of the identified child document, and wherein after deleting of the original document a graphical structure of the visual rendering of the complete tree representing the conversation thread of electronic mail messages is preserved except with a modified graphical representation of the original document, wherein the modified graphical representation of the original document within the visual rendering of the complete tree representing the conversation thread of electronic

mail messages after deleting of the original document visually indicates that the original document has been deleted~~after deleting of the original document~~; and

wherein the shadow document further comprises references to original content and original attachments of the electronic mail message.

10. (Canceled)

11. (Canceled)

12. (Canceled)

13. (Previously presented) The method of claim 3 further comprising:

wherein the tree representing the conversation thread of electronic mail messages presents graphical representations of a plurality of documents in a manner which indicates relationships among the documents.

14. (Previously presented) The method of claim 13 wherein at least one of the plurality of presented documents is the original document.

15. (Previously presented) The method of claim 13 wherein at least one of the plurality of presented documents is the shadow document.

16. (Previously presented) The method of claim 3 further comprising:

(E) resolving the references in the shadow document to the parent document and the child document; and

(F) maintaining in memory data identifying a plurality of shadow documents and any parent and child documents thereof.

17. (Canceled)

18. (Canceled)

19. (Currently Amended) In a computer system operatively coupled to a network and capable of executing a communication process for sending and receiving electronic mail documents, a method comprising:

(A) creating a first shadow document from an original document upon sending of the original document by the communication process, wherein the sent original document is a first electronic mail message within a conversation thread of electronic mail messages;

(B) identifying, within the conversation thread of electronic mail messages, a parent document and a child document of the sent original document, wherein the sent original document is a reply to the parent document of the sent original document and wherein the child document of the sent original document is a reply to the sent original document, and storing references thereto in the first shadow document;

(C) creating a second shadow document from an original document received from another communication process, wherein the received original document is a second electronic mail message within the conversation thread of electronic mail messages;

(D) identifying, within the conversation thread of electronic mail messages, a parent document and a child document of the received original document, wherein the received original document is a reply to the parent document of the received original document and wherein the child document of the received original document is a reply to the received original document, and storing a reference thereto in the second shadow document; and

(E) storing the first and second shadow documents in memory and maintaining data identifying a plurality of shadow documents including the first and second shadow documents and references to any parent and child documents thereof, determining and visually rendering a complete tree representing the conversation thread of electronic mail messages responsive at least in part to the plurality of shadow documents, wherein the visual rendering of the complete tree representing the conversation thread of electronic mail messages graphically represents the original document as a child of the identified parent document and as a parent of the identified child document, and wherein after deleting of the original document a graphical structure of the visual rendering of the complete tree representing the conversation thread of electronic mail messages is preserved except with a modified graphical representation of the original document, wherein the modified graphical representation of the original document within the visual rendering of the complete tree representing the conversation thread of electronic mail messages after deleting of the original document visually indicates that the original document has been deleted~~after deleting of the original document.~~

20. (Canceled)

21. (Currently amended) A computer system coupled to a network and including a computer readable memory having program code stored thereon for executing a communication process for sending and receiving electronic mail documents by performing the steps of:

(A) creating a shadow document from an original document, wherein the original document is an electronic mail message within a conversation thread of electronic mail messages, parsing the original document for selected logistical data comprising any of sender, receiver, original size, subject, or carbon copies of the original document, and storing the logistical data in the shadow document;

(B) identifying, within the conversation thread of electronic mail messages, a parent document and a child document of the original document, wherein the original document is a reply to the parent document of the original document and wherein the child document of the original document is a reply to the original document, and storing references thereto in the shadow document; and

(C) storing the shadow document in a computer usable memory, determining and visually rendering a complete tree representing the conversation thread of electronic mail messages responsive at least in part to the shadow document, wherein the visual rendering of the complete tree representing the conversation thread of electronic mail messages graphically represents the original document as a child of the identified parent document and as a parent of the identified child document, and wherein after deleting of the original document a graphical structure of the visual rendering of the complete tree representing the conversation thread of electronic mail messages is preserved except with a modified graphical representation of the original document, wherein the modified graphical representation of the original document within the visual rendering of the complete tree representing the conversation thread of electronic

mail messages after deleting of the original document visually indicates that the original document has been deleted~~after deleting of the original document.~~

22. (Previously presented) The system of claim 21 wherein (A) further comprises:

(A1) filtering the original document for selected content.

23. (Previously presented) The system of claim 21 wherein the shadow document further comprises selected data from the content of the original document.

24. (Currently amended) A computer system coupled to a network and including a computer readable memory having program code stored thereon for executing a communication process for sending and receiving electronic mail documents by performing the steps of:

(A) creating a shadow document from an original document, wherein the original document is an electronic mail message within a conversation thread of electronic mail messages;

(B) identifying, within the conversation thread of electronic mail messages, a parent document and a child document of the original document, wherein the original document is a reply to the parent document of the original document and wherein the child document of the original document is a reply to the original document, and storing references thereto in the shadow document;

(C) storing the shadow document in a computer usable memory, determining and visually rendering a complete tree representing the conversation thread of electronic mail messages responsive at least in part to the shadow document, wherein the visual rendering of the



complete tree representing the conversation thread of electronic mail messages graphically represents the original document as a child of the identified parent document and as a parent of the identified child document, and wherein after deleting of the original document a graphical structure of the the visual rendering of the complete tree representing the conversation thread of electronic mail messages is preserved except with a modified graphical representation of the original document, wherein the modified graphical representation of the original document within the visual rendering of the complete tree representing the conversation thread of electronic mail messages after deleting of the original document visually indicates that the original document has been deleted~~after deleting of the original document~~; and

wherein the shadow document further comprises references to original content and original attachments of the electronic mail message.

25. (Previously presented) The system of claim 21 further comprising:

wherein the tree representing the conversation thread of electronic mail messages presents graphical representations of a plurality of documents in a manner which indicates relationships among the documents.

26. (Previously presented) The system of claim 25 wherein at least one of the plurality of presented documents is the original document.

27. (Previously presented) The system of claim 25 wherein at least one of the plurality of presented documents is the shadow document.

28. (Previously presented) The system of claim 21 said steps of performing said sending and receiving electronic mail documents further comprising:

(E) resolving the references in the shadow document to the parent document and the child document; and

(F) maintaining in memory data identifying a plurality of shadow documents and any parent and child documents thereof.

29. (Currently amended) A computer system coupled to a network and including a computer readable memory having program code stored thereon for executing a communication process for sending and receiving electronic mail documents by performing the steps of:

(A) creating a first shadow document from an original document upon sending of the original document by the communication process, wherein the sent original document is a first electronic mail message within a conversation thread of electronic mail messages;

(B) identifying, within the conversation thread of electronic mail messages, a parent document and a child document of the sent original document, wherein the sent original document is a reply to the parent document of the sent original document and wherein the child document of the sent original document is a reply to the sent original document, and storing references thereto in the first shadow document;

(C) creating a second shadow document from an original document received from another communication process, wherein the received original document is a second electronic mail message within the conversation thread of electronic mail messages;

(D) identifying, within the conversation thread of electronic mail messages, a parent document and a child document of the received original document, wherein the received original

document is a reply to the parent document of the received original document and wherein the child document of the received original document is a reply to the received original document, and storing a reference thereto in the second shadow document; and

(E) storing the first and second shadow documents in memory and maintaining data identifying a plurality of shadow documents including the first and second shadow documents and references to any parent and child documents thereof, determining and visually rendering a complete tree representing the conversation thread of electronic mail messages responsive at least in part to the plurality of shadow documents, wherein the visual rendering of the complete tree representing the conversation thread of electronic mail messages graphically represents the received original document as a child of the identified parent document and as a parent of the identified child document, and wherein after deleting of the received original document a graphical structure of the visual rendering of the complete tree representing the conversation thread of electronic mail messages is preserved except with a modified graphical representation of the received original document, wherein the modified graphical representation of the received original document within the visual rendering of the complete tree representing the conversation thread of electronic mail messages after deleting of the received original document visually indicates that the received original document has been deleted~~after deleting of the original document.~~

30. (Currently amended) A computer program product including a computer readable memory having program code stored thereon for executing a communication process for sending and receiving electronic mail documents by performing the steps of:

(A) creating a shadow document from an original document, wherein the original document is an electronic mail message within a conversation thread of electronic mail messages, parsing the original document for selected logistical data comprising any of sender, receiver, original size, subject, or carbon copies of the original document, and storing the logistical data in the shadow document;

(B) identifying, within the conversation thread of electronic mail messages, a parent document and a child document of the original document, wherein the original document is a reply to the parent document of the original document and wherein the child document of the original document is a reply to the original document, and storing references thereto in the shadow document; and

(C) storing the shadow document in a computer usable memory, determining and visually rendering a complete tree representing the conversation thread of electronic mail messages responsive at least in part to the shadow document, wherein the visual rendering of the complete tree representing the conversation thread of electronic mail messages graphically represents the original document as a child of the identified parent document and as a parent of the identified child document, and wherein after deleting of the original document a graphical structure of the visual rendering of the complete tree representing the conversation thread of electronic mail messages is preserved except with a modified graphical representation of the original document, wherein the modified graphical representation of the original document within the visual rendering of the complete tree representing the conversation thread of electronic mail messages after deleting of the original document visually indicates that the original document has been deleted~~after deleting of the original document.~~

31. (Previously presented) The computer program product of claim 30 wherein (A) further comprises:

(A1) filtering the original document for selected content.

32. (Previously presented) The computer program product of claim 30 wherein the shadow document further comprises selected data from the content of the original document.

33. (Currently amended) A computer program product including a computer readable memory having program code stored thereon for executing a communication process for sending and receiving electronic mail documents by performing the steps of:

(A) creating a shadow document from an original document, wherein the original document is an electronic mail message within a conversation thread of electronic mail messages;

(B) identifying, within the conversation thread of electronic mail messages, a parent document and a child document of the original document, wherein the original document is a reply to the parent document of the original document and wherein the child document of the original document is a reply to the original document, and storing references thereto in the shadow document;

(C) storing the shadow document in a computer usable memory, determining and visually rendering a complete tree representing the conversation thread of electronic mail messages responsive at least in part to the shadow document, wherein the visual rendering of the complete tree representing the conversation thread of electronic mail messages graphically represents the original document as a child of the identified parent document and as a parent of

the identified child document, and wherein after deleting of the original document a graphical structure of the visual rendering of the complete tree representing the conversation thread of electronic mail messages is preserved except with a modified graphical representation of the original document, wherein the modified graphical representation of the original document within the visual rendering of the complete tree representing the conversation thread of electronic mail messages after deleting of the original document visually indicates that the original document has been deleted~~after deleting of the original document~~; and

wherein the shadow document further comprises references to original content and original attachments of the electronic mail message.

34. (Previously presented) The computer program product of claim 30 further comprising:

wherein the tree representing the conversation thread of electronic mail messages presents graphical representations of a plurality of documents in a manner which indicates relationships among the documents.

35. (Previously presented) The computer program product of claim 34 wherein at least one of the plurality of presented documents is the original document.

36. (Previously presented) The computer program product of claim 34 wherein at least one of the plurality of presented documents is the shadow document.

37. (Previously presented) The computer program product of claim 30 said steps of performing said sending and receiving electronic mail documents further comprising:

(E) resolving the references in the shadow document to the parent document and the child document; and

(F) maintaining in memory data identifying a plurality of shadow documents and any parent and child documents thereof.

38. (Currently amended) A computer program product including a computer readable memory having program code stored thereon for executing a communication process for sending and receiving electronic mail documents by performing the steps of:

(A) creating a first shadow document from an original document upon sending of the original document by the communication process, wherein the sent original document is a first electronic mail message within a conversation thread of electronic mail messages;

(B) identifying, within the conversation thread of electronic mail messages, a parent document and a child document of the sent original document, wherein the sent original document is a reply to the parent document of the sent original document and wherein the child document of the sent original document is a reply to the sent original document, and storing references thereto in the first shadow document;

(C) creating a second shadow document from an original document received from another communication process, wherein the received original document is a second electronic mail message within the conversation thread of electronic mail messages;

(D) identifying, within the conversation thread of electronic mail messages, a parent document and a child document of the received original document, wherein the received original document is a reply to the parent document of the received original document and wherein the

child document of the received original document is a reply to the received original document, and storing a reference thereto in the second shadow document; and

(E) storing the first and second shadow documents in memory and maintaining data identifying a plurality of shadow documents including the first and second shadow documents and references to any parent and child documents thereof, determining and visually rendering a complete tree representing the conversation thread of electronic mail messages responsive at least in part to the plurality of shadow documents, wherein the visual rendering of the complete tree representing the conversation thread of electronic mail messages graphically represents the received original document as a child of the identified parent document and as a parent of the identified child document, and wherein after deleting of the received original document a graphical structure of the visual rendering of the complete tree representing the conversation thread of electronic mail messages is preserved except with a modified graphical representation of the received original document, wherein the modified graphical representation of the received original document within the visual rendering of the complete tree representing the conversation thread of electronic mail messages after deleting of the original document visually indicates that the received original document has been deleted~~after deleting of the original document.~~